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by Nelda Griffin

How Adjustable Revolving Fund Capital Plan Works

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Joseph G. Knapp, Administrator

The Farmer Cooperative Service conducts research studies and service activities of assistance to farmers in connection with cooperatives engaged in marketing farm products, purchasing farm supplies, and supplying business services. The work of the Service relates to problems of management, organization, policies, merchandising, product quality, costs, efficiency, financing, and membership.

The Service publishes the results of such studies, confers and advises with officials of farmer cooperatives; and works with educational agencies, cooperatives, and others in the dissemination of information relating to cooperative principles and practices.

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by Nelda Griffin
Business Administration Branch
Management Services Division

As a result of the Revenue Act of 1962, many farmer cooperative members will be faced with paying income taxes on more than one year's patronage refunds in the same year.

This is because members of a cooperative using a revolving fund plan are now required to pay income taxes on the total amount of the current year's patronage refund -- whether paid in cash or qualified allocations -- and on the cash redemptions of patronage refunds apportioned in prior years -- on which taxes have not already been paid -- being redeemed during the current year.

An adjustable revolving capital plan currently in use by a few farmer cooperatives may be desirable for other cooperatives whose members are faced with this problem. The plan was devised primarily to correct inequities among members in administering the revolving fund. But it also offers possibilities for spreading the tax burden of member patrons over a few years while adjusting to changes in the tax laws.

Before any cooperative can switch from a regular revolving fund method of financing to a modified plan it must first determine the desired level of equity capital in its financial structure. This is a basic requirement of the modified revolving capital plan, described on the following pages.

Each patron's proportionate share of capital to be contributed and maintained in the cooperative is calculated next. The patron continues to contribute to the capital until he invests his predetermined amount.

After that time he makes no contributions and receives no cash redemptions of amount paid in prior years until such time as his proportionate use of the association's facilities are reduced or increased to justify additions to or further revolving of his capital contributions.

Note: This publication adapts and extends a similar section included in General Report 41, Revolving Fund Method of Financing Farmer Cooperatives, published by Farmer Cooperative Service, U. S. Dept. of Agr., March 1958. pp. 32-36.

Effects on Patronage Refunds and Taxable Income

Under this modified plan the patron would be including in his taxable income only one year's patronage refund. For example, assume A, B, and C are members of a cooperative with a regular revolving fund method of financing but that the association decides to change to a modified or adjustable revolving fund plan. Further assume that under the regular plan revolving fund credits have been redeemed by this association through 1957. This means that currently the oldest outstanding credits are for fiscal year 1958.

Necessary information regarding each of the three members, needed to demonstrate the effects of the modified plan, appears in the accompanying tabulation.

Using the regular and the modified revolving fund plans for each of these members a comparison of the total patronage refund, which under the new tax law must be included in the current year's tax return, is shown in the following exhibit.

Since neither Member A nor Member B have met their total capital obligations of $2,000 and $7,000, respectively, as shown in the tabulation on this page, their cash refunds would be limited to 20 percent of their current year's patronage refunds.

As soon as their revolving fund credits equal their predetermined capital obligations (providing capital requirements of the association do not change) they would receive cash for all net earnings attributable to them each year, leaving credits for previous years with the cooperative as their share of operating capital.

Member C's capital obligation is $4,300 and he has revolving fund credits of $5,000. He, therefore, has a credit balance of $700 which would be earmarked for repayment to him. When this amount is actually paid to Member C, he must include it in his taxable income for that year at its redemption value.

Whether actual repayment in cases of this type can be made to "overpaid" members immediately will depend upon the financial condition of the cooperative and whether funds are immediately available. A decision on how such adjustments will be handled will have to be made by each association. Some associations will need a few years to make all adjustments -- those involving underpayments as well as overpayments. Then, assuming a constant level of patronage and a constant capital requirement by each patron, the effect would be an annual cash repayment of all the net earnings attributable to each patron.

Member	Revolving fund credits allocated in 1958	Total revolving fund credits outstanding (1958-1962)	Adjusted capital obligations	Patronage refund for the current year (1963)
Member A	$200	$1,500	$2,000	$300
Member B	1,100	4,000	7,000	800
Member C	600	5,000	4,300	500

EXHIBIT A

I. Amounts to be included in taxable income provided no change is made in the cooperative's revolving fund plan:

Member A

Cash redemption value of patronage refunds allocated in 1958 and redeemed during the current year........................	$200
Cash payment of 20 percent of current year's patronage refund.................	60
Qualified allocation of the balance of the current year's patronage refund.....	240
Total patronage refunds which Member A must include in his taxable income this year...........	$500

Member B

Cash redemption value of patronage refunds allocated in 1958 and redeemed during the current year........................	$1,100
Cash payment of 20 percent of current year's patronage refund.................	160
Qualified allocation of the balance of the current year's patronage refund.....	640
Total patronage refunds which Member B must include in his taxable income this year...........	$1,900

Member C

Cash redemption value of patronage refunds allocated in 1958 and redeemed during the current year.......................	$600
Cash payment of 20 percent of current year's patronage refund.................	100
Qualified allocation of the balance of the current year's patronage refund.....	400
Total patronage refunds which Member C must include in his taxable income this year...........	$1,100

II. Amounts to be included in taxable income provided cooperative adopts modified revolving fund plan:

Member A

Cash payment of 20 percent of current year's patronage refund..................	$60
Qualified allocation of the balance of the current year's patronage refund......	240
Total patronage refunds taxable to Member A for the current year.......	$300

Member B

Cash payment of 20 percent of current year's patronage refund..................	$160
Qualified allocation of the balance of the current year's patronage refund......	640
Total patronage refunds taxable to Member B for the current year......	$800

Member C

Cash payment of full amount of current year's patronage refund..................	$500
Total patronage refunds taxable to Member C for the current year.......	$500

Development of Modified Plan

Roughly 60 percent of all marketing and farm supply cooperatives use the regular revolving fund method of financing. Where patronage is constant, volume fluctuations small, and members remain active, this method of repaying the oldest outstanding capital first has worked well.

When an association has been in business for a number of years and a portion of its membership has become inactive, when deliveries of products to the association have become irregular, and when the revolving fund period has been of extended duration, substantial financial inequities among members arise in administration of the revolving fund.

A few years ago, a group of cooperatives operating on the revolving fund basis were confronted with this problem and asked Farmer Cooperative Service to develop a plan to eliminate the inequities. The result was a proposal of a modified form of revolving fund plan presented here in summary form. Under it, each member's revolving fund credits are adjusted annually to his patronage. Thus every member, both active and inactive, is on either a paying in or a paying out basis, but not on both bases in any one year.

Steps Necessary to Implement

The following steps are considered necessary for cooperatives to change to the adjustable revolving fund plan:

1. Determine the desired level of capital requirements of the association.

2. Compute each member's share of the revolving fund annually.

3. Adjust each member's balance in the revolving fund annually.

4. Determine each member's balance in the revolving fund on the basis of an annual moving average.

5. Adjust each member's revolving fund account by debit and credit entries.

Table 1 shows the adjustments in revolving fund balances required to implement the adjustable capital revolving fund plan after the desired level of capital requirements of the association has been determined.

The capital obligations of members under the adjusted revolving fund plan are developed as follows:

1. Indicate the amount of each individual member's equity in the revolving fund at the end of the current fiscal year, as shown in column 2. For example, member number 1 had $788 of revolving fund credits outstanding in the local association's revolving fund at the end of the 1962 fiscal year. The total amount of active and inactive members' capital equity in the association revolving fund at the end of 1962 was $63,422.

2. Determine the amounts of revolving fund deductions of <u>active</u> members for the 5 fiscal years preceding the date of such calculation. (The period of preceding 5 years was selected on an arbitrary

Table 1. - *Capital revolving fund plan adjusted on a 5-year patronage basis for individual members compared with their actual investment position on December 31, 1962*

Members numbered consecutively	Revolving fund credits outstanding to individual members on December 31, 1962	Average revolving fund deductions for preceding 5 years	Percent that each member's average revolving fund deduction for preceding 5 years is of total average revolving fund deductions for the same 5 years	Each active member's adjusted capital obligations	Amount of capital adjustment for each active member[1]
1	$788	$31	.3708	$236	+$552
2	2,984	522	6.2433	3,959	-975
3	7,707	972	11.6254	7,370	+337
4[2]	1,541	-	-	-	-
5	730	82	.9807	624	+106
6	508	[3]254	3.0379	1,928	-1,420
7	6,149	751	8.9822	5,698	+451
8	13,241	1,643	19.6508	12,465	+776
9	1,626	[3]542	6.4825	4,111	-2,485
10[2]	194	-	-	-	-
11	1,476	151	1.8060	1,147	+329
12[2]	20	-	-	-	-
13	2,504	254	3.0379	1,928	+576
14	256	31	.3708	234	+22
15	883	110	1.3156	836	+47
16	1,546	186	2.2246	1,409	+137
17	5,458	675	8.0732	5,120	+338
18	220	[3]73	.8731	556	-336
19[2]	1,771	-	-	-	-
20	1,355	166	1.9854	1,258	+97
21	2,453	[3]590	7.0566	4,473	-2,020
22	548	60	.7176	451	+97
23[2]	528	-	-	-	-
24	8,873	1,268	15.1656	9,619	-746
25[2]	63	-	-	-	-
Totals	63,422	8,361	100.0000	63,422	+3,865 -7,982

[1](+) Amount of capital to be repaid to member. (-) Required amount of additional capital to be furnished by member.
[2]Inactive members having total equities of $4,117 in the association revolving fund.
[3]Active member of association less than 5 years.

basis. For some associations it might be more desirable to use a different number of years in the average. The current period of revolution of the revolving fund, for example, might well be used.)

The primary consideration underlying this step is to obtain a ratio for each member which reflects his use of the association. Ordinarily, physical units such as field boxes or hundredweight can be used. However, where uniform rates of retain are applied, calculation of the average on the basis of revolving fund deductions will yield the same result. In situations where active members have participated less than 5 years the average

is determined on the basis of the actual number of years in which the members have been active in the association.

The average of the revolving fund deductions for the preceding 5 years is a key factor in determining the amount of capital adjustment required of each member. Column 3 shows the average of the revolving deductions of each active member in the association's revolving fund. For example, the average of the revolving fund deduction of member number 1 in the association revolving fund is $31.

3. Next calculate the percentage that individual members' average revolving fund deductions for the last 5 years is of the total average amount of active members' deductions for the same period. Column 4 shows percentages obtained in this manner. Using member number 1, as an example, a percentage of .3708 is obtained by dividing this member's average revolving fund deductions of $31 by $8,361, the total average revolving fund deductions for preceding 5 years.

4. Determine each active member's share of the association's revolving fund of $63,422 (column 2) by applying the percentages from column 4 to this total. For example, the amount of member number 1's capital requirement in the association revolving fund is thus determined to be $236.

5. The difference between the amount of capital determined for each individual member on the basis of revolving fund deductions for the preceding 5 years, and the individual member's actual share in the association's outstanding revolving fund at the date of such computation (column 2 minus column 5) indicates the total amount of capital adjustment for each member. This adjustment indicates each active member's capital position and whether he is overpaid or underpaid in terms of his investment in the association, based upon his use of the association during the preceding 5 years.

If the adjusted amount of capital exceeds the member's actual investment in the revolving fund, he is underpaid and therefore would be eventually required to furnish additional amounts of capital to the association.

For example, member number 2, with $2,984 in revolving fund credits outstanding in the association revolving fund, has a capital requirement of $3,959 when calculated on the preceding 5-year patronage basis. This member will be required to furnish an additional $975 as his proportional share of capital based on his patronage for the preceding 5 years.

On the other hand, member number 1 has credits outstanding in the revolving fund of $788 as compared with his requirement of $236. This member will be credited with an additional $552 earmarked for repayment to him. Whether actual repayment can be made immediately will depend upon the funds available through payments by members and commitments to repay older outstanding capital contributions of both active and inactive members.

Choosing the method of accounting for the capital adjustments will probably need to be done by the board of directors, perhaps on a 5-year basis. Another alternative might be to use the same number of years as in the present period for which revolving funds are being repaid. After the plan is initiated, capital adjustments should be made for each fiscal year.

Evaluation of Adjustments Necessary

The data presented in the illustration on page 5 show the adjustments necessary to implement the adjustable revolving fund capital plan with an association's revolving fund. Six members of this association will eventually be required to furnish $7,982.

Of this amount, $4,117 will be required at a given time to replace capital in the association revolving fund furnished by former members who are at the time inactive. The amounts of additional capital to be furnished by these six members range from $336 to $2,485.

These adjustments are the result of changes in the member volume of business as well as in member capital which has to be repaid to former members. The amounts of capital that eventually will have to be repaid active members range from $22 to $776.

The adjustable capital plan does not appear to be adaptable for greatly expanding organizations or for those heavily in debt. Before the plan can be put into effect, many other aspects should be fully investigated. These include legal considerations, explaining the plan to members, and obtaining any required consent of members having equity in revolving funds.

It is not recommended that the adjustable revolving fund capital plan be used to finance all cooperatives because it is suitable for particular rather than general usage. However, this method of financing does merit consideration by some associations. Further research and study are recommended to individual associations before deciding whether or not to adopt the adjustable capital plan.

Apparent Advantages

Application of the plan materially affects the annual amounts required as revolving fund deductions as well as the amount of the revolving fund repayments. Some apparent advantages are:

- The plan preserves the revolving fund principle but only net capital adjustments are revolved.
- It lessens immediate impact of financing the cooperative for some members.
- It provides a clearer basis for letting members know the exact amount of their capital responsibilities to the association.
- It has an important psychological effect on members in financing cooperatives.

Apparent Disadvantages

The use of the adjustable revolving fund capital plan requires additional record keeping. However, this should not be a major obstacle. Some apparent disadvantages are:

- Some growers find the plan difficult to understand.
- The plan necessitates changes in bylaws before it can be adopted.

Conclusion

The adjustable capital plan is being used by a few associations. It deserves consideration by other associations in a position to adopt it. One of the primary considerations appears to be a reasonably stabilized position of member capital. In addition, a slowly changing membership and a volume of business not in a declining position are significant considerations. There is no reason, however, why an association now actively increasing its member capital should not ultimately adopt the principle of revolving net balances.

The procedure for installing an adjustable capital plan summarized here was worked out for the use of a particular farmer cooperative. All the data are actual data taken from the special confidential case study report prepared for the cooperative by Edward C. Collins and Kelsey B. Gardner, former employees of the Farmer Cooperative Service.

The illustration meets the requirements for use of the adjustable capital plan in the following respects: (1) The association has reached a reasonably stable capital position, (2) the membership has changed slowly, (3) the facilities are used near their capacity, (4) the membership is small, which lessens the amount of recordkeeping, and (5) small membership makes explaining and understanding the adjustable capital plan easier.

Other Publications Available

Revolving Fund Method of Financing Farmer Cooperatives, General Report 41, March 1958. Helim H. Hulbert, Nelda Griffin, and Kelsey B. Gardner.

How Farmers Finance Their Cooperatives, Reprint 145, 1958.

How the Revenue Act of 1962 Affects Farmer Cooperatives, General Report 105, October 1962. Raymond J. Mischler and David Volkin.

Methods of Financing Farmer Cooperatives, General Report 32, June 1957. Helim H. Hulbert, Nelda Griffin, and Kelsey B. Gardner.

Employee Incentive Plans -- Case Studies of Five Farmer Cooperatives, General Report 104, August 1962. Nelda Griffin.

Mergers for Stronger Cooperatives, Reprint 208, 1961. Staff of FCS and Office of General Counsel, USDA.

A copy of each of these publications may be obtained upon request while a supply is available from --

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